

## **BRIEF DESCRIPTION OF THE DRAWINGS**

**Fig. 1** is a block diagram of the air conditioner control system of this invention.

**Fig. 2** is an illustration of a graph of a typical prior art thermostat system for an air conditioner.

**Fig. 3A** is an illustration of a bar chart for cooling time in designated temperature ranges.

**Fig. 3B** is an illustration of a graph of cooling load and air conditioner capacity for specified temperatures.

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**Fig. 3<sup>3C</sup>** is an illustration of a graph of coefficient of performance of air conditioners for specified temperatures.

**Fig. 4** is an illustration of a graph of residential load and utility system peak.

**Fig. 5A** is a data format for a lookup table for a three-level cooling system.

**Fig. 5B** is a data format for a lookup table for warming rates to calculate cooling time constants.

**Fig. 6A** is an illustration of a graph of approximate time and temperature contents.

**Fig. 6B** is an electrical diagram for approximating cooling time constants in a structure.

**Fig. 7** is a block diagram for an air conditioning system of this invention in normal mode of operation.

**Fig. 8A** is a block diagram of the system in Fig. 7 in peak reduction mode